

THE EARLY STAGES OF INDIAN *LEPIDOPTERA*.

BY

D. G. SEVASTOPULO, F.R.E.S.

PART XI

(Continued from Vol. xliii, No. 3 (1942), p. 415).

RHOPALOCERA

PAPILIONIDAE

Chilasa clytia L., *clytia*

Sevastopulo, *Journ. Bomb. Nat. Hist. Soc.*, xl, 393. 1938.

Talbot, *Fauna Brit. Ind.*, Butterflies (2nd edit.), i, 115, pl. 1, figs. 5, 6. 1939.

I have bred this species yearly since 1931, and all larvae have been of the black and cream form first described. This year (1942) all larvae found have had the normally black areas an olivaceous grey dotted with black, not unlike Talbot's figure referred to above, but with the spots larger and fewer. I am unable to account for this sudden change of form.

Talbot, quoting Bell, gives the following description:—'Velvety black or dark green, with a dorso-lateral row of carmine circular spots. A creamy dorsal band on segments 3 to 7, narrowing at both ends and flanked by a broad, lateral, similarly coloured band; also a broad creamy band on segments 11 to 14 externally. Two lateral rows of sharp spines on segments 1 to 4, and a single row on the other segments. Osmeterium a light watery indigo-blue. Length 55 mm.' This description is incorrect in several details—the spines are subdorsal not lateral, the cream bands are wrongly placed, and there are three rows of carmine spots instead of one.

My original description contains an error. It is the lower lateral series of spots that is complete from the 4th to 11th somite, the upper series has spots on the 3rd, 4th, 5th, 7th, 8th and 9th somites only.

Papilio polytes L., *romulus* Cr.

Moore, *Lep. Ceyl.*, i, 150. 1880-81.

Davidson & Aitken, *Journ. Bomb. Nat. Hist. Soc.*, v, 366. 1890.

Bingham, *Fauna Brit. Ind.*, Butterflies, ii, 62. 1907.

Jordan, *Seitz Indo-Austr. Rhop.*, ix, 61. 1909.

Talbot, *Fauna Brit. Ind.*, Butterflies (2nd edit.), i, 177, pl. 1, figs. 18a, 18b, 19. 1939.

Immature larva—Head brown. Body dark olive brown, in some examples almost chocolate, with a diffused white lateral stripe on the thoracic somites, a white V-shaped mark, starting laterally on

the 5th somite with the arms joining dorsally on the 8th, and a broad white lateral band on the 10th and 11th somites with a transverse bar across the dorsum of the 12th. A white sublateral line from the 6th somite backwards. 1st somite with a black-tipped, yellowish subdorsal spine. 2nd and 3rd somites with a transverse series of six very short blunt tubercles, barely visible without a lens. 5th somite with a similar lateral tubercle and a dorsal series of four, the centre two in front of the others. 6th to 10th somites each with a similarly placed dorsal series of four. 11th somite with a dorsal pair of slightly larger, pointed, white tubercles. 12th somite with a dorsal pair of still larger tubercles. 4th somite rather swollen. Osmeterium dark purple. Legs brownish. Prolegs greyish white.

Full grown larva similar to that of *Papilio demoleus* L. (1939, mihi, *Journ. Bomb. Nat. Hist. Soc.*, xli, 311) except that the osmeterium is more scarlet than orange; the ocellus on the 3rd somite consists of a black spot surmounted by two whitish dots and surrounded by a yellowish green ring; the line joining the two ocelli is composed of black-ringed yellowish spots; instead of the fawn transverse stripe on the 4th somite there is a very sinuous white line edged behind by an olive green stripe; the subdorsal spines on the 11th somite very much smaller and whitish.

Pupa suspended by a girdle and tail pad of greyish silk. Head bifid, the horns rather longer than in *P. demoleus*, thorax keeled, the keel forming a short forward-pointing horn, the wing cases protruding, abdomen angled at base so that the thorax is bent backwards, three pairs of small subdorsal spines on the abdomen, the hindmost pair smallest. Colour variable, usually green or mottled brown and grey. The green form with a fawn speck at the base of the wing cases, a bluish-white diffused stripe along their upper edge, which continues as a latero-ventral stripe along the abdomen. The anterior portion of the abdomen with a large subdorsal yellow-green triangular mark, with a small red-brown speck at the anterior angle. The brown and grey forms usually with a dark triangular mark on the wing cases. One specimen formed on white paper had a chalky white dorsal stripe on the apical somites of the abdomen.

Food-plant—*Citrus* spp. and *Aegle marmelos* Correa.

Described from a larva found in Calcutta, pupated 22-viii-42, and a male emerged 1-ix-42.

Moore's description is as follows:—'Larva smooth, glossy-green much attenuated posteriorly, anterior segments swollen and scutellated, fourth and fifth segments with dorsal transverse cream-coloured fleshy crest, that on the fourth ending on each side in an eye-like spot; a brown-streaked cream-coloured oblique band ascending from the base of seventh segment, and is nearly united with that from the opposite side on back of ninth segment; a similar-coloured broken lateral band on the tenth segment, which is continued round base of anal segment, the latter segment with two small pointed fleshy tubercles. Pupa curved anteriorly; head flattened and slightly bifid, thorax conical in front, abdominal somites with short dorsal tubercles. Colour olive-brown.'

PIERIDAE

Catopsilia crocale Cr.

Sevastopulo, *Journ. Bomb. Nat. Hist.*, xl, 394. 1938.

Talbot, *Fauna Brit. Ind.*, Butterflies (2nd edit.), i, 491. 1939.

A large number of larvae bred in Calcutta in July 1942 all had the usual black lateral line expanded into a wide dorso-lateral stripe, varying both in width and in depth of colour. In some examples the dorsum was also suffused with blackish.

Whilst not wishing to re-open the controversy of whether *C. crocale* L. and *C. pomona* F. are conspecific or not, it is worth recording that a number of larvae reared from ova found on *Cassia fistula* L., the reputed favourite food-plant of *C. pomona*, in the hope that they would prove to be this species, all turned out to be *crocale*. Also young *crocale* larvae, found on a small plant of one of the pink-flowered Cassias, fed up readily and well on *Cassia fistula*.

HETEROCERA

LYMANTRIIDAE

Caragola ochripes Moore

Gardner, *Indian Forest Records*, iii, 202, figs. 9, 20, 21. 1938.

Head pale orange. Body with the dorsum pure white, minutely streaked and speckled with black. 1st somite with four crimson tubercles, the outer pair larger and tufted with longish white hair. 2nd and 3rd somites each with six small orange tubercles tufted with short white hair. 4th and 5th somites each with paired dorsal brushes consisting of a ring of short thick rose-pink hair surrounding a dark tubercle with a pale glandular apex. 6th somite with a dorsal tuft of very short white hair and a minute orange wart with a rosette of short white hair. 7th to 9th somites each with two pairs of these orange warts with white hairs. 10th somite with similar warts but the hairs deep yellow. 11th somite with a dorsal tuft of short pale yellow hair. 12th somite deep yellow. A series of sub-lateral yellow tubercles bearing fringes of long white hair, the area below these tubercles pale yellow. Legs and prolegs pale yellow. Venter pale yellow slightly tinged with grey. Dorsal glands yellow.

Pupa under a few netted threads spun across the hollow of a leaf. Ivory white, the dorsum tinged with olive brown. A chestnut patch at the base of the wing case. Dorsum of abdomen, just behind the broadest part, with two pairs of blackish dorsal spots. A tuft of longish pale grey hair from the head, two groups of three long spatulate black hairs from the abdomen just above the wing cases, and another group towards the cremaster. Venter clad with longish white hair. Dorsum of abdomen with three paired tufts of short brownish hair and one of white. Wing cases slightly black-veined.

Food-plant—Gardner gives *Litsea polyantha* Juss., *L. chinensis* Lam. and *Phoebe lanceolata* Nees, all *Lauraceae*.

Described from a full fed larva found in Shillong 24-iv-41, pupated 13-v-41, and a female emerged 21-v-41.

LASIOCAMPIDAE

Metanastria hyrtaca Cr.

Sevastopulo, *Journ. Bomb. Nat. Hist. Soc.*, xl, 406. 1938.
 Subramanian & Anantanarayanan, *Journ. Bomb. Nat. Hist. Soc.*,
 xl, 257. 1938.

Ovum almost spherical. Chalky white, the micropyle a dark chocolate-brown spot, and a large dark chocolate-brown spot on either side of the ovum. Laid in small batches.

A fairly powerful hand lens did not reveal the fine sculpturing and the irregular dirty grey faint markings mentioned by Subramanian and Anantanarayanan.

EUPTEROTIDAE

Eupterote undata Blanch.

Head dull black, the clypeus filled in with creamy-white and with a broad creamy-white stripe from apex of clypeus to vertex and extending along the back of the head; a fringe of short, dark golden-brown hair above the mandibles. Body very dark brown, the intersegmental areas almost black. A subdorsal and sublateral dark pinkish line. Clothed fairly thickly with longish, pale-tipped, dark brown hair, growing in spreading tufts subdorsally, laterally and sublaterally. The dorsal area on the abdominal somites clothed, in addition, with large patches of very short, black-brown hair. Spiracles pinkish. Venter dark brown, not hairy. Legs dark brown. Prolegs yellowish-flesh colour.

Cocoon of dark brown, closely woven, rather papery silk, with an inner cocoon of dark brown silk interwoven with larval hair. Pupa dark mahogany, very shiny, the abdominal somites very minutely punctate. Cremaster closely covered with golden, short, hooked spines. The divisions between the leg, antenna and wing cases not well marked.

Food-plant—*Quisqualis indica* L., *Lantana camara* L., *Alseodaphne semicarpifolia* Nees. and numerous other trees and shrubs. One larva was even found feeding on a coarse, ornamental Grass.

Described from a full fed larva found in Calcutta 16-xi-41, spun 19-xi-41, and a female emerged 29-vi-42.

Eupterote geminata Wlk.

Penultimate instar—Head terra-cotta, a black mark on either side low down and a double black spot just above the clypeus. Body with a broad, pale brown, dorsal stripe with a double, darker, median line, and a broad, blue-grey, dorso-lateral stripe containing two cream lines. A subspiracular cream line. Clothed with long whitish hair. Venter cream with a purplish-black lateral stripe. Legs chestnut. Prolegs pink. Spiracles set in pink patches.

Final instar—Similar to the penultimate, but the pale brown dorsal stripe obscured on the abdominal somites by a coating of short, dark brown, silky hair, and the subspiracular line absent. Lateral area brownish. Head with a wavy pale horizontal line above the lower black marks and below the upper, and with a pale inverted V-shaped mark with its apex on the vertex.

The larvae are gregarious, congregating on the trunk and branches of the food-tree in close packed, furry masses by day, and feeding by night. The larvae rest close together, the heads usually pointing in one direction, in slightly curved rows, and may cover an area of two or more square feet. The hairs are extremely irritating and I know of a case where some syces had to desert their usual sleeping place because a tree close by was harbouring these larvae in large numbers.

Pupa in a cocoon of dense greyish-brown silk interwoven with larval hair. Reddish chestnut, the wing cases rather paler. Surface dull, the cuticle densely punctate. The abdominal somites somewhat contracted. Cremaster a fairly long, stout spine armed with a few short bristly hairs.

Food-plant—Various trees and shrubs, among them *Lagerstroemia indica* L.

Described from larva found in Calcutta 19-x-41, one of which spun 26-xi-41, and a female emerged 8-v-42.

SPHINGIDAE.

Theretra pinastrina Mart., *pinastrina*.

Butler, *Proc. Zool. Soc. Lond.*, ix, 560, pl. 92, fig. 8. 1877.

Hamps., *Fauna Brit. Ind.*, Moths, i, 88. 1892.

Mell, *Biol. u. System. der Sudchin. Sphing.*, 310, pl. xi, figs. 12-18 (figs. 18-24), pl. xix, figs. 19-21. 1922.

Seitz, *Seitz Indo-Austr. Bombyces*, x, 567. 1929.

Bell & Scott, *Fauna Brit. Ind.*, Moths, v, pl. vi, figs. 6, 7. 1937.

Ovum—Jade green, of the usual ovoid Sphingid type. Laid singly on the upper or lower surface of a leaf of the food-plant. Hatched 23-viii-42.

1st instar—Head round, green. Body green, at the end of the instar with a yellowish white subdorsal line only visible under a lens. Horn shorter than in most first instar Chaerocampid larvae, straight, black, the base reddish-orange, the tip slightly bifid. Moulded 25-viii-42.

2nd instar—Similar but with a minute black dot on the subdorsal line on somites 4 to 9, the spot placed about one-third of the somite's length from the anterior edge. An indistinct bluish dorsal line. Horn reddish. Moulded 27-viii-42.

3rd instar—Similar, but colour rather yellowish green and speckled minutely with yellow. An additional black dot on the 10th somite, and all ringed with whitish later in the instar. Horn short, dark pink. Fore part of the body slightly tapered. Moulded 29-viii-42.

4th instar—Variable, the usual form similar to the preceding instars, but with the black spots enclosed in an oval ring, bluish white above and yellowish below, the whole edged with a black line. Horn shorter comparatively. Legs pinkish. Another form has a suffused reddish-brown stripe above the subdorsal line from the ocellus on the 6th somite to the base of the horn. A third form has the whole dorsum between the subdorsal stripes suffused with rufous. A fourth form has the green colour, including the head, replaced by rufous. These last three forms with the prolegs deep

pink. A fifth form has the head and body dark chocolate brown, a narrow, double, paler stripe on the dorsum and a paler lateral stripe. Ocelli with the pupil black, the iris whitish, the whole enclosed in a black ring. Horn blackish brown. Legs, prolegs and venter brownish pink. Moulded 31-viii-42.

Final instar—Bred green form—Head green. Body yellow green. 4th somite with a small round subdorsal ocellus, consisting of a round black pupil surrounded by a greenish-white iris, the whole ringed by a black line. 5th to 9th somites with larger, similarly coloured, but oval, ocelli, the upper edge more convex than the lower. 10th somite with the ocellus reduced to the black pupil only. Legs pink. Prolegs deep pink. Spiracles purple with the ends whitish. Horn very short, straight, smoky at the sides, pinkish above, the extreme tip yellow.

Bred dark form—Head dull brownish olive, with a darker stripe each side of the clypeus, and speckled with paler. Body purplish brown, a dark chocolate brown median line, a dark chocolate brown, broad subdorsal stripe from head to base of horn and narrowing at both ends; the lateral area with a narrow whitish stripe above and below, tinged with chocolate brown on the thoracic somites and speckled throughout with whitish. Ocelli placed as in previous form and cut by the lower edge of the subdorsal stripe; the pupil black, the iris whitish and narrow above, deep yellow and slightly wider below, the whole encircled by a black line. Legs pink. Venter and prolegs very dark chocolate. Spiracles black with the ends yellowish. Horn with the upper surface orange, the sides dark chocolate, the extreme tip orange with a dark chocolate ring below. Pupated 5-ix-42.

There is a considerable amount of variation in the tint of the ground colour and in the degree of contrast between the dark and pale areas. In some examples the chocolate colour is tinged with olive, in others with reddish chestnut. Normally the dorsal and lateral areas are the same colour but the lateral area may be suffused with chocolate; in some examples the dorsal and lateral areas were cream-coloured. One specimen had the dark areas blackish purple, the light areas somewhat paler. The ocelli vary considerably in size. The contrast between the dark and pale areas is most marked early in the instar, later the contrast is reduced and the colours themselves degraded to a muddy or yellowish brown.

Wild green form—Wild green larvae are slightly different to the bred form. Head green. Body yellow green with minute yellow dots. Ocelli the same shape as in the other forms but the pupil blue-green, the iris of those on the 4th, 5th and 10th somites creamy yellow outlined by a black ring, of the remainder orange shading into yellow and outlined by a black ring. One had the ocelli on somites 6 to 8 only with the orange iris. Another had no orange round any of the ocelli and had the outlining black ring much broader above than below. Spiracles mauve with white ends. Legs pink. Venter and prolegs green. Horn green in some examples, pinkish in others, the extreme tip yellow.

Wild brown form—Head golden brown. Body pale golden

brown, a dark dorsal line on the thoracic somites. A slightly darker golden brown subdorsal stripe, faintly streaked with dark brown, from head to base of horn and narrowing at both ends. The ocelli with the pupil black, the iris purplish shading into whitish above, and pale orange shading into yellow below, the whole ringed by a black line. Legs pink. Prolegs and venter pinkish brown. Spiracles dark brown, the ends yellowish. Horn dark golden brown, the extreme tip orange. One bred example belonged to this form.

Pupa in captivity in a slight cocoon among litter. In the field a number were found spun up in growing leaves of the Arum on which they had been feeding. Colour pale yellowish bone colour, minutely streaked with dark brown, the abdominal somites with a dark olive dorsal line and a dark olive subdorsal stripe, traces of a dark spiracular stripe, a latero-ventral and median ventral stripe. Wing cases lined with dark brown. Tongue case forming a slight frontal keel. Spiracles protruding slightly. Cremaster short, black and pointed.

Food-plant—Arums of various species. Bell and Scott give *Jussiaea repens* L., *Boerhaavia* and *Aroideae* as food-plants.

Described from larvae bred from ova or found in their first and second instar in Calcutta.

Hampson describes the larva as 'green, with the dorsal area red-brown; a subdorsal paler line with equal sized ocelli from 4th to 10th somites with green centres; horn red brown.' Seitz writes 'Larva green or earth-coloured with lighter lateral stripes, on the 4th to 10th rings dark-centred eyes surrounded by dark; horn small. It chiefly lives on Taro (*Colocasia antiquorum*), also on *Jussiaea* (sic)'.

NOCTUIDAE.

Selepa celtis Moore.

Moore, *Lep. E. I. Co.*, 353, pl. 16, fig. 8a. 1858.

Hamps., *Fauna Brit. Ind.*, Moths, ii, 370. 1894.

Hamps., *Cat. Lep. Phal.*, xi, 298. 1912.

Gaede, *Seitz Indo-Austr. Noctuidae*, xi, 396. 1937.

Gardner, *Indian Forest Records*, vi, 276. 1941.

Head black. Body greenish yellow, under a lens with indistinct longitudinal whitish lines. Some examples with traces of a black lateral line. A large black dorsal spot on 5th, 10th and 12th somites. Clothed with longish, single, white hairs, in some examples the hairs on the thoracic somites black. Legs and prolegs greenish yellow. The black dorsal spots do not appear until the penultimate instar. Gregarious.

Cocoon canoe-shaped of tawny silk, and covered with frass, etc. in captivity; in nature probably spun on a branch and covered with bark fragments. Pupa slender, golden yellow, the dorsal area on the abdomen tinged with orange, the lateral with green.

Food-plant—*Lagerstroemia indica* L. Gardner gives the following list, *Shorea robusta* Gaertn., *Eugenia jambolana* Lamb., *Careya arborea* Roxb., *Terminalia tomentosa* W. & A., etc.

Described from a number of larvae found in Calcutta, one of which spun 29-vii-42, and a male emerged 7-viii-42.

Hampson, in the Catalogue, gives the following reference and description:—'Semper, *Reise. Phil., Schmett.*, ii, 529, pl. Q, figs. 12-14—Yellow; head black; dorsal black patches on 5th, 10th and 11th somites; a lateral reddish line with a series of black spots; hairs long and sparse; forms a cocoon covered with faeces.' This description of Semper appears to be the basis of that in the Fauna and also in Seitz. Gardner correctly places the dorsal spots on the 2nd, 7th and 9th abdominal somites, but also mentions a smaller one on the 8th abdominal somite, this latter was absent in my specimens.

Attatha ino Drury

Hamps., *Cat. Lep. Phal.*, xiii 10. 1913.

Head slightly flattened, pale green very slightly tinged with brown. Body pale green, very similar in colour to the young leaves of Peepul on which it feeds, a broad white subdorsal line. The dorsal chord is plainly visible as a dark, pulsating streak. Legs pale green. Prolegs pale green slightly tinged with brown. Spiracles pale buff. The larva is somewhat flattened, particularly the thoracic and posterior somites. Before pupation the ground colour turns purplish pink and the lines fade.

Pupa subterranean in a slight cocoon of earth and silk. Colour dark purple brown, the thorax and wing cases darker, a darker dorsal stripe and the intersegmental areas. Cuticle punctate, the thorax and wing cases more so. Cremaster ending in a pair of divergent spines.

Food-plant—Peepul (*Ficus religiosa* L.).

Described from a full fed larva found in Calcutta 16-iv-42, buried 18-iv-42, and a male emerged 27-iv-42.

Hampson gives the following reference and description:—'*Indian Museum Notes*, v, p. 114, pl. xiii, ff. 6a, b. Yellowish white or dark pink above, yellowish white below; lateral lines pale, more or less distinct; each somite with a few colourless bristles; head dirty white, pinkish, or brown. Food-plant, Pipal. Pupates underground without cocoon'.

Cosmophila sabulifera Guen.

Gardner, *Indian Forest Records*, vi, 288. 1941.

Head yellow green. Body olive green, a darker dorsal line due to the contents of the intestines, a white subdorsal line, a slightly sinuous white lateral line and a sinuous whitish sublateral line. Intersegmental rings yellowish. 1st somite with two dorsal, a subdorsal, and a lateral black dot on the anterior edge and a second series of two dorsal, a smaller subdorsal and lateral immediately behind. 2nd and 3rd somites with a black dot just above the subdorsal line, one between it and the lateral line, and three below. 4th to 11th somite with two dots above the subdorsal line, one between it and the lateral, and two below, the one above and anterior to the spiracles, the other below and posterior. 8th and 9th somites with

an additional spot at the base of the proleg. 12th somite similar but with no spots below the lateral line. The black dots all ringed indistinctly with whitish and with a single, short, black bristle. Venter, legs and prolegs rather more silvery green. The first pair of prolegs reduced. Spiracles brown ringed with whitish.

Pupa in a slight cocoon among leaves. Dull olive brown, a darker dorsal stripe on the abdominal somites, the intersegmental areas also darker. Minutely punctate. Cremaster ending in a bunch of golden brown hooked spines.

Food-plant—Gardner gives *Grewia tiliaefolia* Vahl, *G. asiatica* var. *vestita* Wall., *G. laevigata* Vahl and *Eriolaena Hookeriana* Wight and Arn.

Described from a full fed larva found in Calcutta 25-viii-42, pupated 28-viii-42, and a female emerged 3-ix-42.

Gardner gives the following description:—'Head dull yellow, body dull fairly dark green with two fine pale lines along each side. Setiferous rings on white spots themselves encircled by pink. Spiracles white with black rims. Prolegs on A₃ abruptly reduced. Labral emargination less than half deep. Length about 30 mm.'

Ericeia (Polydesma) inangulata Guen.

Head pale brown, reticulated with darker, a white spot on each side of the vertex; or in darker individuals blackish brown speckled with white and with two larger white spots on top of each lobe. Clypeus outlined with orange and with an orange line from apex to vertex. Body tawny brown, an orange dorsal stripe with a double central dotted line, a dark tawny subdorsal stripe sprinkled with minute dark dots and with a series of small white spots—two to each somite, a slightly paler tawny lateral stripe speckled with darker dots, which are more numerous in the middle, below this a darker tawny, dark speckled stripe, and below this again a paler tawny, dark speckled stripe. Venter pale tawny with a dark brown central stripe. Legs orange brown. Prolegs tawny, the feet pinkish, the first pair obsolescent. Spiracles blackish. Head and body with very short, very sparse, black hairs. Some examples are very much darker, the dark tawny stripes being almost black. When young very Geometer-like.

Pupa, in captivity, in a cocoon spun under a leaf and covered with earth. Rather slender, reddish brown, thorax and wing cases slightly darker, intersegmental areas darker. Pruinose spiracles black. Apex of abdomen longitudinally wrinkled, the cremaster consisting of two longish, stout, hooked spines with a number of shorter and finer spines behind.

Food-plant—*Cassia fistula* L.

Described from a full fed larva found in Calcutta 29-vii-42, pupated 2-viii-42, and a male emerged 10-viii-42.

GEOMETRIDAE.

Scopula cleoraria Wlk.

Head pale brown with a whitish subdorsal and lateral stripe. Body brownish green, with an indistinct darker dorsal stripe, more

noticeable intersegmentally, and a whitish lateral line. 4th and 5th somites with an irregular, dark brown, sublateral spot, in some examples on the 6th and 7th somites also. The intersegmental divisions yellowish. Legs pale brown marked basally with darker. Shape very long and thin, slightly broader posteriorly. Rests extended straight out away from the support, or very slightly curved. The fore part is never coiled up. Turns crimson before pupation.

Pupa in a slight cocoon between leaves, in a state of nature probably among litter. Pupa pale chestnut tinged with green, the wing cases olive green. Spiracles black. Crémaster ending in two stout, longish, divergent, hooked spines, with four finer spines ventrally, last segment of abdomen with a transverse dentate dorsal ridge.

Food-plant—A cultivated Lantana, *L. sellowiana*.

Described from a full fed larva found in Calcutta 25-viii-42, pupated 31-viii-42 and a male emerged 7-ix-42.

PYRALIDAE.

Trachylepidia fructicassiella Rag.

Head chestnut. Body greyish with a chestnut dorsal plate on the 1st somite. Each somite with two pairs of minute black dots on the dorsum. A double lateral series of slightly larger black dots, one below and one above the spiracle. Anal somite marked with blackish. Legs chestnut. Venter and prolegs whitish. Spiracles chestnut ringed with black. A single colourless hair from each of the black spots.

Pupa in a shuttle-shaped cocoon of dense white silk. Venter and wing cases honey colour shading into a very pale chestnut dorsally on the thorax and abdomen. 1st to 8th abdominal somites with two chitinous, blackish, dorsal teeth, those on the 1st to 7th somite slightly apart, on the 8th almost joined.

The larvae live each in a separate compartment in the pod of *Cassia fistula*, but appear to congregate together to pupate, a compartment being completely filled with cocoons and frass.

Food-plant—*Cassia fistula* L., living in the pod and eating the ripe seeds.

Described from a full fed larva found in Calcutta 19-iv-42, pupated 24-iv-42, and a female emerged 29-iv-42.

Pachyzancla aegrotalis Zell.

Head brown. Body yellowish, appearing blue green from the contents of the intestines, a darker dorsal line. 1st and 2nd somites with a subdorsal black spot. A white spiracular line. A few colourless hairs arising from olive green spots, only visible under a lens. Legs colourless. Prolegs yellowish green. Lives in a spun together leaf.

Pupa in a spun together leaf, reddish chestnut, slender.

Described from a full fed larva found in Calcutta 30-vi-42, pupated 2-vii-42, and a male emerged 7-vii-42.

(To be continued)